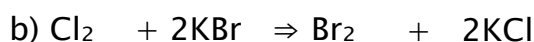
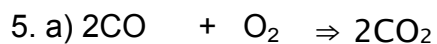
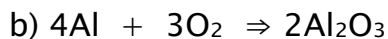
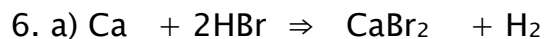


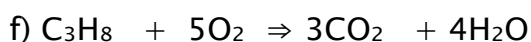
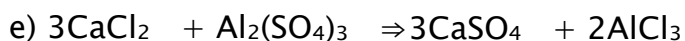
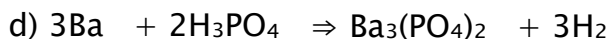
Answers Chp 6 Review



c) balanced



c) balanced



12. Mass of reactants = Mass of products

metal + acid solution = product + gas

$$3.4 \text{ g} + 102.5 \text{ g} = 105.6 \text{ g} + x \text{ (gas)}$$

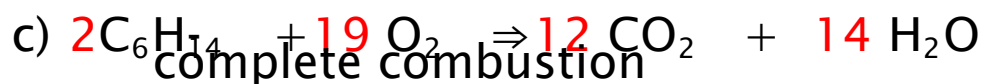
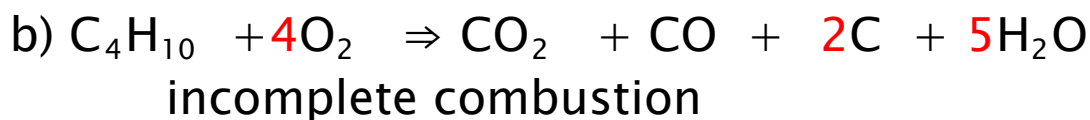
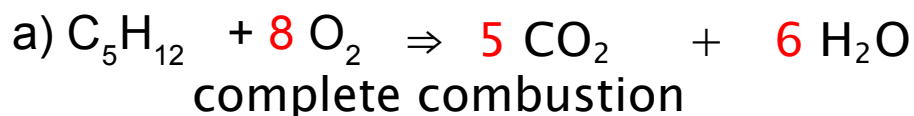
$$105.9 \text{ g} = 105.6 \text{ g} + x \text{ (gas)}$$

$$x \text{ (gas)} = 105.9 \text{ g} - 105.6 \text{ g}$$

$$= 0.3 \text{ g}$$

The mass of gas produced is 0.3 g.

Part C



Part D

calcium + acid \Rightarrow product + gas

$$4.5 \text{ g} + 103.8 \text{ g} \Rightarrow 109.4 \text{ g} + ?$$

$$108.3 \text{ g} \Rightarrow 108 \text{ g} + ?$$

$$108.3 \text{ g} - 108 \text{ g} = 0.3 \text{ g}$$

The law of conservation of mass states that the mass of the reactants must equal the mass of the products in a reaction. The mass that is missing is the mass of the gas because it has evaporated into the air and cannot be measured in the beaker.